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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,483	11/20/2003	Nicolas Roux	245510US41X DIV	6694
22850	7590	06/30/2006		EXAMINER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NGUYEN, KEVIN M	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/716,483	ROUX, NICOLAS
	Examiner Kevin M. Nguyen	Art Unit 2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 20 November 2003.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-19 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 20 November 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 10/062,671.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/20/04, 6/9/05</u> .	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

### ***Drawings***

1. The drawings (figure 1) are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: a dialog device 1, a computer 3, left window screens E1 to E3 for pilot, right window screens E6 to E8 for copilot, a left cursor control device 5, a right cursor control device 5, a left auxiliary control device 8, a right auxiliary control device 8, at pages 8 and 9. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of copending Application No. 10/716,535.

4. Claim 1 of current application No. 10/716,483 substantially compares to claim 1 of copending Application No. 10/716,535 in the table comparison below:

Claim 1 of current application No. 10/716,483	Claim 1 of copending application No. 10/716,535
A dialog method for dialog between an operator of an aircraft, comprising the steps of:  displaying on a display at least one window including a plurality of responsive objects respectively associated with one of	A dialog system for dialog between an operator of an aircraft and at least one system of the aircraft, comprising:  a display configured to display at least one window including a plurality of responsive objects respectively associated with one of

multiple functions of the at least one system of the aircraft;	multiple functions of the at least one system of the aircraft;
moving a cursor on the display so as to designate a responsive object such that when the cursor is on the responsive object, a main object marker appears and designates the responsive object; and	a cursor control device including a cursor moving mechanism configured to move a cursor on the display so as to designate a responsive object such that when the cursor is on the responsive object, a main object marker appears and designates the responsive object; and
discretely displacing an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker.	an auxiliary control device including a discrete moving mechanism configured to cause a discrete displacement of an auxiliary object marker on the display, responsive object by responsive object, so as to designate another responsive object without affecting control of the main object marker.

By comparing one by one limitation in the table indicated above, a recitation of the intended use of the claimed invention, e.g., a dialog method is the intended use for a dialog system.

Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the dialog method of the scope of claims 1-19 in the current Application No. 10/716,483 into the dialog system of the scope of claims 1-32 in copending Application No. 10/716,535, because this would provide more productive and more industrial.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 1-19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14-17, 19-23, 27, 42, 45, and 47-50 of copending Application No. 10/062,671, which has been issued allowance filed on 5/25/2006.

Current Application recites at least one limitation in claims 1 and 10 "discretely displacing an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker," whereas the conflicting copending Application No. 10/062,671 recites at least one limitation in claim 14, 45, 47 and 48 "auxiliary control means, which are arranged so that they can also be actuated by said operator, that control an auxiliary object marker without affecting control of said main object marker." It would have been obvious to make the claimed limitation of the current Application and copending Application No. 10/062,671 are different, but this limitation performs the same

functionality for the movement of the first cursor and the second cursor on the display screen independently of each other.

Current Application recites at least one limitation in claims 5 and 15 "wherein the main object marker has priority over the auxiliary object marker such that when the main object marker and the auxiliary object marker are on a same responsive object, the main object marker appears", whereas the conflicting copending Application No. 10/062,671 recites at least one limitation in claims 14, 45, 47 and 48 "wherein control of the main object marker by said cursor control device has priority over control of the auxiliary object marker by said auxiliary control means when the two markers, main and auxiliary, are on the same interactive window".

Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to recognize that the scope of claims 1-19 in the current Application No. 10/716,483 is broader than the scope of claims 14-17, 19-23, 27, 42, 45, and 47-50 in copending Application No. 10/062,671, which has been issued allowance filed on 5/25/2006.

6. Claims 1, 10, 5 and 15 of this application conflict with claims 14, 45, 47 and 48 of Application No. 10/062,671. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application.

Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (IDS cited, US 6,784,869) hereinafter Clark in view of Ebert et al (newly cited, US 5,931,874) hereinafter Ebert.

8. As to claim 1, Clark teaches a dialog method for dialog between an operator of an aircraft and at least one system of the aircraft, comprising the steps of:

displaying on a display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft [at least one display window 206 (fig. 2) includes a plurality of objects associated with one of multiple functions 210, see fig. 2, col. 6, lines 60-64];

moving a cursor on the display so as to designate a responsive object such that when the cursor is on the responsive object, a main object marker appears and designates the responsive object [a cursor control device (CCD) 212 (fig. 2) including a cursor moving mechanism. The cursor is placed on the desired menu item, see col. 5,

lines 55-56, and col. 7, lines 48-65. Thus, the cursor is placed on the desired menu item corresponds to a main object marker as claimed];

displacing an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object [the switches 212a1, 212a2, and 212a3 (fig. 2A) corresponding to an auxiliary control device including a discrete moving mechanism, which jumps the cursor from display to display in the direction shown in, col. 6, lines 20-31, for further details of the explanation].

Accordingly, Clark et al teaches all of the claimed limitation of claim 1, except for "discretely displacing an auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker."

However, Ebert teaches discrete control setting for displacing an auxiliary object marker [44] on the display object [12] without affecting control of the main object marker [50], [see col. 6, line 65—col. 7, line 9, col. 7, lines 10-23, lines 39-59, and col. 10, line 66-col. 11, line 2, for further details of the operation].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the movement of the first cursor (50) and the second cursor (44) independently of each other (corresponding to displacing an auxiliary object marker on the display object without affecting control of the main object marker) as taught by Ebert for the intended use Clark's input devices in order to control the cursors, because this would improve user friendly interface is desired which allows the pilot to keep his or her hand on the aircraft's control stick and eyes on the

multifunction display while selecting commands, reduces the number of operations required by the pilot, reduces the number of functions that the pilot must memorize and allows faster response time (see Ebert, col. 2, lines 50-55).

9. As to claim 2, Clark further teaches comprising: activating a function associated with the responsive object designated by the main object marker; and activating a function associated with the responsive object designated by the auxiliary object marker [see col. 8, lines 15-43 for further details of the operation].

10. As to claim 3, Ebert teaches wherein the step of discretely displacing the auxiliary object marker [44] and the step of activating [activating the missile 12] the function associated with the responsive object designated by the auxiliary object marker is performed with keys on a separate stand-alone unit [a control stick 36] [see col. 7, lines 10-23, and lines 39-55 for further details of the operation].

11. As to claim 4, Ebert teaches wherein the responsive objects are arranged according to at least one direction defined on a corresponding window, and wherein the method further comprises the step of discretely displacing the auxiliary object marker from one responsive object to another responsive object in the at least one direction [see col. 7, lines 39-55 for further details of the operation].

12. As to claim 6, Clark teaches wherein the step of moving the cursor causes the cursor to move in a continuous manner on the display [see col. 6, lines 31-40 for further details of the explanation].

13. As to claim 7, Figure 4 of Clark expressly discloses wherein the at least one window includes a plurality of windows, and wherein the step of moving the cursor

moves the cursor discretely from one window to another window in the plurality of windows [see col. 6, lines 20-31 for further details of the explanation].

14. As to claim 8, Figure 4 of Clark expressly discloses wherein the display includes a plurality of displays, and wherein the step of moving the cursor moves the cursor from one display to another display in the plurality of displays [see col. 6, lines 20-31 for further details of the explanation].

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark in view of Ebert, and further in view of Yoshino et al (IDS cited, US 5,548,304) hereinafter Yoshino.

The combination of Clark and Ebert teaches all of the claimed limitation of claim 1, except wherein the main object marker has priority over the auxiliary object marker such that when the main object marker and the auxiliary object marker are on a same responsive object, the main object marker appears.

However, Yoshino teaches a plurality of cursor control units A, B, C, D (see fig. 18a) including the function of priority access levels of both main cursor and auxiliary marker (see col. 12, lines 40-42 for further details of the explanation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to learn the teaching of Yoshino, e.g., controlling cursors including the functionality of priority access levels of the main cursor over auxiliary cursor for the combination of Clark and Ebert, because this would prevent the confusion and the damage to the image information due to mistakes by a plurality of operators of lower ranks (see Yoshino, col. 3, lines 12-20).

16. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark in view of Ebert, and further in view of Oder et al (IDS cited, US 5,475,594) hereinafter Oder.

The combination of Clark and Ebert teaches all of the claimed limitation of claim 1, except wherein the step of discretely displacing the auxiliary object marker is activated during an emergency mode of the aircraft.

However, Oder teaches the key 39 which activates the emergency menu 52 (see fig. 6, col. 9, lines 34-45 for further details of the explanation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the auxiliary control device including the key 39 which activates the emergency menu 52 as taught by Oder in the auxiliary control device of Clark and Ebert, because one skilled in the art would recognize that this would provide the operator to access certain functions directly by a single action (pushing down the corresponding function key). These characteristics are obviously particularly advantageous in critical situations, and are reserved for particular functions, e.g. functions which are implemented when an important element (engine, etc.) of the aircraft fails.

#### ***Claim Rejections - 35 USC § 102***

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claims 10 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Clark.

19. As to claim 10, Clark teaches a dialog method for dialog between an operator of an aircraft and at least one system of the aircraft, comprising the steps of:

displaying on a display at least one window including a plurality of responsive objects respectively associated with one of multiple functions of the at least one system of the aircraft [see Figs. 2A];

activating a main object marker [a first cursor] appearing on a responsive object so as to initiate execution of a corresponding function of the at least one system; and

activating an auxiliary object marker [a second cursor] appearing on the responsive object so as to initiate execution of another corresponding function of the at least one system without affecting the corresponding function executed by activating the main object marker [see Figs. 2A, 4 and 5, col. 6, lines 20-53, and col. 8, lines 15-43 for further details of the explanation].

20. As to claim 16, Clark teaches wherein the step of moving the cursor causes the cursor to move in a continuous manner on the display [see col. 6, lines 31-40 for further details of the explanation].

21. As to claim 17, Figure 4 of Clark expressly discloses wherein the at least one window includes a plurality of windows, and wherein the step of moving the cursor

moves the cursor discretely from one window to another window in the plurality of windows [see col. 6, lines 20-31 for further details of the explanation].

22. As to claim 18, Figure 4 of Clark expressly discloses wherein the display includes a plurality of displays, and wherein the step of moving the cursor moves the cursor from one display to another display in the plurality of displays [see col. 6, lines 20-31 for further details of the explanation].

23. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark in view of Ebert.

24. As to claim 11, Clark teaches all of the claimed limitation of claim 10, except further comprising: moving a cursor on the display so as to designate a responsive object such that when the cursor is on the responsive object, the main object marker appears and designates the responsive object; and discretely displacing the auxiliary object marker on the display, responsive object by responsive object, so as to designate a responsive object without affecting control of the main object marker.

However, Ebert teaches that limitation indicated above [see Figs. 3 and 4, col. 6, line 65—col. 7, line 9, col. 7, lines 39-59, and col. 10, line 66-col. 11, line 2, for further details of the operation].

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the movement of the first cursor (50) and the second cursor (44) independently of each other (corresponding to displacing an auxiliary object marker on the display object without affecting control of the main object marker) as taught by Ebert for the intended use Clark's input devices in order to control

the cursors, because this would improve user friendly interface is desired which allows the pilot to keep his or her hand on the aircraft's control stick and eyes on the multifunction display while selecting commands, reduces the number of operations required by the pilot, reduces the number of functions that the pilot must memorize and allows faster response time (see Ebert's col. 2, lines 50-55).

25. As to claim 12, Clark further teaches comprising: activating a function associated with the responsive object designated by the main object marker; and activating a function associated with the responsive object designated by the auxiliary object marker [see Figs. 2A, 4 and 5, col. 6, lines 20-53, and col. 8, lines 15-43 for further details of the explanation].

26. As to claim 13, Ebert teaches wherein the step of discretely displacing the auxiliary object marker [44] and the step of activating [activating the missile 12] the function associated with the responsive object designated by the auxiliary object marker is performed with keys on a separate stand-alone unit [a control stick 36] [see col. 7, lines 10-23, and lines 39-55 for further details of the operation].

27. As to claim 14, Ebert teaches wherein the responsive objects are arranged according to at least one direction defined on a corresponding window, and wherein the method further comprises the step of discretely displacing the auxiliary object marker from one responsive object to another responsive object in the at least one direction [see col. 7, lines 39-55 for further details of the operation].

28. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark in view of Yoshino.

Clark teaches all of the claimed limitation of claim 10, except wherein the main object marker has priority over the auxiliary object marker such that when the main object marker and the auxiliary object marker are on a same responsive object, the main object marker appears.

However, Yoshino teaches a plurality of cursor control units A, B, C, D (see fig. 18a) including the function of priority access levels of both main cursor and auxiliary marker (see col. 12, lines 40-42 for further details of the explanation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to learn the teaching of Yoshino, e.g., controlling cursors including the functionality of priority access levels of the main cursor over auxiliary cursor for the combination of Clark, because this would prevent the confusion and the damage to the image information due to mistakes by a plurality of operators of lower ranks (see Yoshino, col. 3, lines 12-20).

29. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark of Oder.

Clark teaches all of the claimed limitation of claim 10, except wherein the step of discretely displacing the auxiliary object marker is activated during an emergency mode of the aircraft.

However, Oder teaches the key 39 which activates the emergency menu 52 (see fig. 6, col. 9, lines 34-45 for further details of the explanation).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the auxiliary control device including the

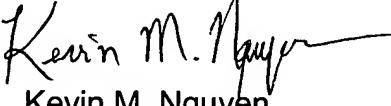
key 39 which activates the emergency menu 52 as taught by Oder in the auxiliary control device of Clark, because one skilled in the art would recognize that this would provide the operator to access certain functions directly by a single action (pushing down the corresponding function key). These characteristics are obviously particularly advantageous in critical situations, and are reserved for particular functions, e.g. functions which are implemented when an important element (engine, etc.) of the aircraft fails.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Art Unit 2629

KMN  
June 21, 2006